BEFORE THE
ENVIRONMENTAL PROTECTION AGENCY
OF
PENNSYLVANIA

IN RE: DRAKE SUPERFUND SITE/DRAKE CHEMICAL

BEFORE: ROY SCHROCK, CHAIRMAN
LEANNE NURSE
GARY JONES
TIM HARRINGTON

DATE: JUNE 23, 1994, 7:09 P.M.

PLACE: ULMER PLANETARIUM
LOCK HAVEN UNIVERSITY
FAIRVIEW STREET
LOCK HAVEN, PA 17745

REPORTER: HEATHER J. GOSS

MS. NURSE: Good evening, ladies and gentlemen. My name is Leanne Nurse and I'm a Community Relations Coordinator for the United States Environmental Protection Agency. And you usually refer to us simply as EPA.

We are based in the Philadelphia office which serves what we call Federal Region Three. And it covers activities in Pennsylvania, Delaware, Maryland, Virginia, West Virginia and the District of Columbia.

But, of course, tonight what we would like to talk with you about is the Drake Chemical Superfund Site right here in Lock Haven. I just wanted to, for those of you who may or may not have attended the meetings about this site in the past, talk a little bit about public participation in the Superfund.

And the Superfund program, of course, has been mandated by Congress to allow you, the people, a say in certain specific points at which you are formally given the opportunity to participate in the decision making for cleanups of Superfund sites. But in this case, you've been very fortunate because due to some continuity of staffing, which is very unusual with any large organization, Roy Schrock, the Project Manager, has been engaged in a constant dialogue here in the community both with you as citizens and with local officials as well.

So at this point in the Superfund process in terms of where we are and what happens when a site is newly discovered and the studies are done and decisions are made about how to clean it up, there is a period of time during which the actual cleanup operation is designed technically. We call that remedial design.

And what we are going to talk about tonight is some of the technical aspects and other questions that you have about how the cleanup will proceed at the Drake Chemical Superfund Site.

This kind of meeting is not required necessarily by the Superfund Law. But we think it's really important since you have lived with the site for all this time and you will be living with the cleanup and once everything is all cleaned up and we are gone, then you will still be here and it's important for you to understand why we think the way that we're proceeding is appropriate, and also to respond to specific questions that you may have sent in.

How many people responded to the coupon in the Lock Haven Express? Did anybody cut out their coupon? Good. We got one person who read The Express. Thank you very much.

But in any case -- oh, another gentleman.

AUDIENCE: I just wanted to say, I can hardly

hear you. I don't know if you can use a microphone or not, but it would be helpful.

MS. NURSE: I'll speak up. I'm capable of getting very loud. It's okay. It comes in handy at public meetings, but I try not to be overbearing about it.

We were able to pull together some people that we hope will help you in responding to questions you've had in the past, questions that may come up during the course of this evening's meeting.

We have people from both EPA, from the Pennsylvania Department of Environmental Resources, from the United States Army Corps of Engineers, and also from one of our contractors, Rust, and they will be also responding to some of the technical aspects of the cleanup.

Now, in terms of ground rules, we've got a lot of people here this evening and I'm sure everybody has got lots of questions, whether or not you had submitted them in the past. And one of the things that Roy has been able to keep doing at this site is to make transcripts of all of the meetings that we have had for the general public, and it's been a useful tool because it's a way for you to go back to the library to the various repositories and say, oh, that's the answer to that question that you may have forgotten about at the particular moment.

So for the purposes of our public record, we

would invite you to identify yourself when you speak and ask your questions, and if you'd like to give any particular organizational affiliation, that is fine.

You should also understand, however, that due to some recent changes in the EPA policy, if you don't feel comfortable identifying yourself, it is okay, because your name will show up in the transcript simply as audience, or I think our stenographer will give us some other kind of tag. So you will get credit for your remarks. You will see your conversation in the transcript, but it's strictly up to you whether you'd like to be personally identified or not.

We want to thank the folks in Lock Haven for allowing to us come one more time and interrupt your busy schedules, and especially the folks at the University for letting us use the Planetarium.

As you are probably more familiar than I, toilet facilities are down this way. There is a pay phone in another part of the building, but I think we can get to it pretty easily.

Again, we appreciate the fact that you have taken time out of your schedules, and I would like at this point to let the various staff people here introduce themselves to you and then turn the meeting over to Roy Schrock, who is the Remedial Project Manager for EPA.

Roy. They know who you are, but you should stand up for those who don't.

MR. SCHROCK: I'm Roy Schrock. I'm with EPA. And I'm the Project Manager for the site.

MS. NURSE: Why don't we start with the folks from DER.

MS. DOWNS: My name is Sandra Downs, I'm a Project Officer for the State of Pennsylvania.

MR. NEWCOMER: Larry Newcomer, I'm the Manager of the Antracites Program out of the Williamsport office.

MS. ROBINSON: Tracy Robinson, local government liaison for DER.

MR. SWANSON: I'm Todd Swanson, I'm with the Corps of Engineers, Baltimore District, and I'm the resident engineer here at Lock Haven.

MR. MODRICKER: My name is Dave Modricker. I'm a Project Engineer with the Army Corps of Engineers in Lock Haven.

MR. CONWAY: My name is Tom Conway. I'm also one of the project engineers for the Drake Chemical Site.

MS. NURSE: A couple other folks from DER.

MR. ZANONI: I'm Dan Zanoni and I'm a Community Relations Coordinator for DER's office in Williamsport.

MR. HARRINGTON: I'm Tim Harrington and I'm the Vice President and Officer in Charge of this project for

Rust Remedial Services.

MR. JONES: I'm Gary Jones. I'm the Project Manager with the project for Rust.

MR. ZUKOW: I'm Victor Zukow. I'm the Resident Manager in charge of the construction of the site.

MR. SCHROCK: As far as the actual presentation tonight, I don't really have a set or planned agenda that I expect to go through. I did get some of the questions and I'm going to try to respond to those questions.

But I also think that with the number of people here, we probably have some people with questions in hand, in fact, I'm sure we do. So I want to go through some of the ideas that I think are important to present, and through the question and answer period I'll try to cover the remaining ideas that I sort of put together on my list of questions.

I want to basically thank you all for coming. I know in the middle of the Summer it is not as easy to get out and go about these kind of activities, but from what I can see, this is a pretty good turnout for some of our recent meetings.

The last meeting we actually held was in December of '92. That meeting had -- actually the dates had to shift around because of some snow storms we had that year. And I have been actually talking about having a

meeting up here since last September, but once we got into the Winter, it just seemed like being able to plan a particular day and having the weather cooperate was sort of difficult.

So I have waited until now and there is a couple reasons that I waited this long. The first of it is that within the last month or so we put some more documents into the repositories. Those documents are the bid specifications that EPA, the Corps released out to the different contractors who were interested in this job.

And we also had a series of amendments that went with those bid specifications. All of those documents are in the repositories now, and we also included a copy of the proposal from Rust which describes in a little more detail what they plan to do at the site.

So I wanted to have those documents available so that there might be a chance to look at them and to develop some of your questions based on those documents. If you haven't seen them, like I say, they are in the library still. The reason I think you need to see those is that they form the basis of the contract for our work at the site.

The contract requirements are rather specific and go into a lot of detail. And just the way the Army Corps sets out the specs, they all have different page

numbers and codes that form different sections. So the documents I have put in the library have been restamped with different page numbers that are part of what we call an administrative record for the site.

So if you do get a chance to look at these documents and there is a particular section maybe on the air monitoring that really raises a question, try and write down that page number too, so if I get another question regarding a particular comment or a requirement that we have made, if you put that page number, it's AR, about five or six numbers after it, that will help direct me to the exact place where you were reading so that I can try and figure out exactly what the answer would be to those kinds of questions. So again, just feel free to go look at those when you have some time. Okay.

We put the bid spec out, I think originally in April of '93, and went through the series of amendments and a pre-bid meeting and we got some questions from a lot of different vendors, in fact. And the one thing that I was very pleased about in terms of the review of the bid specs and the review of the different proposals is, we got a good number of companies that were interested in doing this job.

I think that competition is a very good thing when you are looking at this kind of an activity where it's very important that we want to go after companies who know

what they are doing and how to do it best. And that's, in fact, the way we did approach this review of the different proposals from contractors.

We reviewed them first on the technical qualifications. A panel of people, I think there might have been seven or eight different government personnel reviewing the proposals and they were to rank each of the contractors, each of the proposals in terms of their technical qualifications.

And then there was a second step where we looked at the costs associated with each of those proposals. And then we went back out with a series of questions for the contractors, asking them to clarify certain things about their proposals which maybe needed more detail.

And I'm actually very pleased to say that we ended up selecting Rust and they were, in fact, the most technically qualified of all the bids that we received. So I want you just to be, if there is any comfort in it, we didn't go for the low bidder just because we wanted to save money. We actually chose the contractor that we felt could do the best job and seemed to understand what they were going to do.

And for me that is really very important because incineration is a technology that I am still in the

learning curve by going through the process that I have gone through and working with the Corps, the contractors. I'm still in the process of learning certain things about what it is they are actually doing and how they are going to do it.

So we have hired a contractor who has the experience, has the knowledge and has the kind of staff available to us to answer the kind of questions that may come up that are really maybe things I personally can't answer but I can find somebody in that company who will help me understand it so that I can then explain it back to the public.

So the contract was officially awarded on September 30, 1993. The bid proposal was for $46.3 million.

I want to get back to the competition factor here because when we proposed to do the incineration remedy back in 1988, the government estimate at that time was about $88 million.

And then over the course of the design where we developed the specific requirements that we were asking for, and in some of the meetings that we had here and in other places, in City Hall, things like that, people started talking about a cost of $120 million and I know that the figure of $120 million was thrown around in the

newspaper and on the radio for a few months.

So I feel that coming in at 46.3 million is a substantial savings over the estimates that the government had to begin with and that people had talked about. And again, we also were selecting the most qualified technically capable contractor.

So I'm rather pleased with the way the bid process went. I'm pleased with the company we selected. And I know that we've got a long road ahead of us and there is probably going to be things that will change in the course of time whereby these costs will increase.

If there are certain things that we feel are necessary for public health, public protection, response to local concerns, EPA is more than willing to spend more money and provide that kind of protection that we need.

So as I go through some of the things tonight, I will try to point out things that, yes, I may have to pay more than the original bid, but the Government, EPA, feels that it's worth it if it's necessary for the protection of public health.

All right. The first thing I just want to go over is the schedule. I know that is probably one of your main concerns, what is going to happen next and when do we expect things to really be really busy back in the Drake Chemical Site.

If things are going well, we still have a lot of documents that need to be reviewed and approved by the Government and the DER. But the proposed schedule, I'd say, would be actually mobilized back here at the site starting sometime this summer, probably late summer.

The first kind of activities would be just to set up trailer facilities, get the utilities connected, things like that, and then eventually go into what we'll call the site area which will actually be what we call an exclusion zone.

So what that really means is that we are going to be doing activities in areas that are considered clean first and then we will begin activities in the contaminated areas.

One of the first things we are going to be doing is to actually install sheet pile around the perimeter of the site. Sheet pile is basically a wall that will go down through the soils so that when we go to start digging out the approximately nine acres down to twelve and a half feet, the sheet pile will actually hold the cleaner soils that are outside of our excavation area and will allow us to go down twelve and a half feet.

The reason we chose to dig the twelve and a half feet is because that is basically where the water table starts. The soils go down the twelve and a half feet

and then we get into more of a sand layer and the groundwater is actually within that sand area.

This part of the project is dealing with just excavation, incineration of the soils. The groundwater will be a separate treatment which we would hope to go through in the near future by coordinating with the AC&C Company who already has a treatment plant there.

But before I can reach the point where we are actually going to start pumping water and treating water, we are going to need to sign legal documents which will allow them to do the work for EPA and work out any kind of credit or liability issues. So I do have a number of lawyers involved in that. And that in itself is going to take some time.

The one thing we do have to be aware of is that there are actual regulations that govern incinerators. There is a set of laws called Resource Conservation and Recovery Act which has a section dealing specifically with incinerators.

And one of the main things that the RCRA regs require is that you prove that this incinerator will meet certain destruction requirements. That is the same words, but they by regulation must prove that they can, let's say destroy 99.99 percent of the contaminants which are at the site.

What it really means though is that they have to make sure that when you have contaminated materials going in, that no more than .01 percent of those contaminants will go out the stack of that incinerator. So that is one of the main things we have to prove, and those kind of tests to prove the equipment actually works right will be done in what we call a trial burn.

So once we go through this sheet pile, we have installed that and that should start, I'd say early winter; if we are lucky a little earlier. And once we have the sheet pile in, they've got a couple things they have to do before they actually build an incinerator.

One is to replace a water and sewer line which are running through contaminated soils, so we are actually going to be digging out the contaminated soils, replacing the water/sewer line and filling that back in with clean dirt.

They also have to dig out an area down the twelve and a half feet where they are actually going to place the incinerator. By the time they get through those two activities, putting back in the clean dirt and beginning the construction of the incinerator, it probably will be February or March of next year.

And then once we have the incinerator built, then we will get ready to do the trial burn. The trial

burn will probably not happen until, I'd say early summer of '95. The trial burn, as I said, is required to prove that this piece of equipment works like we intend it to work and to prove that it works as the company has proposed that it is capable of working.

Once we get those tests results, we have to evaluate those results, see if they, in fact, met the requirements, and then we will go into what we call issuing a permit so that they can begin operation. So our real full-time burning of the dirt will not occur probably until Summer of '95, sometime during that summer.

And if everything goes as we plan, the actual amount of time it's going to take to burn the 200,000 cubic yards is now down to about one year worth of time. So that means we should be basically done with all the incineration by Summer of '96.

And following that, following the closure of the site, we're basically going to cover it with a soil cap and revegetate it. The incinerator will be picked up and moved off the site and will no longer remain in Lock Haven.

I know this has come up at other meetings before, but it is, in fact, the way the Superfund program works. This incinerator is meant to be used only at the Drake Site for the contaminated materials that we have at the Drake Site. When we are done with that treatment, they

something should happen, we have the system in place in the county already to help deal with any emergencies that might occur.

And in line with that, we are actually going to be conducting a health and safety training session for some of the local emergency folks, some of the local fire fighters, some of the local officials. I think it's to be held July 11th, and I don't know if the township folks have been aware of that, but I assume that there will probably be at least some spots if we need local officials who want to at least be able to walk into the facility and see what they are doing.

You need to have this health and safety training before you can go into what we call this exclusion zone where the contaminated areas are. So we are going to be providing that in hopes that should something happen, that we have people who are capable and able to go in and help Rust and EPA, the Corps, deal with any kind of emergency problems.

I think the main point I would like to get across tonight is that we are going to be doing a lot of monitoring. And monitoring actually means a number of things, when you look at the word and you look at our plans as to how we are going to do it.

So I would like to go over five different areas

where we will be doing monitoring and I want you to feel free that when I'm done with it, if you want me to repeat it, I would like to go through that again, because I know it's -- it's not really that confusing but I have stood up here at a number of meetings and I've said a number of things about monitoring. And I know some of you that have been here to every meeting have still questions about, well I thought you were going to do this or I thought you were going to do that. So I think that is the first thing I would like to cover and I really want to spend some time to make sure that it's clear.

The thing that I have said in the past is that we are going to be doing continuous monitoring of the incinerator. Now, continuous monitoring actually means to monitor the incinerator to see that it is working properly.

And the way we are going to do that is to set certain conditions based on the Trial Burn Plan which will tell us these are the parameters, this is how they should be operating within this number and this number for a number of different factors. They will actually be doing monitoring of carbon monoxide, carbon dioxide, oxygen, nitrogen oxides, temperatures and flow rates.

There might be one or two more parameters, but those are the things that we will look at on a continuous basis all the time that the unit is in operation. And if,

in fact, it operates within the conditions we set at the Trial Burn Plan, then we believe the unit is operating properly.

Now, that continuous monitoring is actually done at the facility. They will have a trailer set up there with computers attached to the incinerator so that they can actually check these things all the time.

We have also promised to do this same kind of continuous monitoring so that the public can actually see whether or not this incinerator is operating properly by themselves. What we had planned to do is set up another, I'll call it a computer screen, someplace in the community which will show each of those parameters that we are monitoring on a continuous basis.

We would like to set it up in a place that is available to the public so that even at 2:00 in the morning somebody could go in, take a look at it and make sure that, in fact, the company is operating this thing correctly.

As of yet we haven't determined the exact location for the computer screen in the community, but there's a number of possibilities. But again, we've got to find someplace that is open all day and that has some kind of staff there that may be responsible to help people look at this thing or show them where it is once they want to find it.

The other kind of monitoring that we will be doing, during the trial burn we will actually have what they call sample collectors in the stack of the incinerator. And those sample collectors will be doing the actual chemical analysis of what is going on at that stack.

So we will be looking for a number of different organic compounds, the different chemicals that could be coming out of the soil, different types of chemicals. They have what they call the volatiles and the semi-volatiles. But we will still be looking for all different kinds of chemical compounds that are in the soil already or that, in fact, could be created by going through the heating process.

They will also be looking for dioxins, furans, again the nitrogen oxides, and this chemical data will be used as the basis for EPA and DER to evaluate if, in fact, this unit is operating properly and if, in fact, it is going to be protective of public health.

Once I get the data from the trial burn, the chemical data from the trial burn, EPA will go back and conduct what we call a risk assessment. If you were here for the November '91 meeting, we did do a presentation on risk assessment, but that was based on an incinerator size that we made up, a typical size that was in the industry at that time.

And based on the wind flow directions in Lock Haven, we modeled it to see where, in fact, the chemicals would fall out into the community and to model what those concentrations would be.

And based on that preliminary analysis, we did come up with numbers that were protective of public health. I'm not a toxicologist so I have a hard time trying to explain exactly what these risk numbers mean, but the way we look at it is, what is the chances for an increase in cancer in one in a million people based on these emissions.

For the calculations we did back in 1991, we were looking at, there would be an increased risk for one in ten million based on the emissions from the incinerator. And the problem at that time was really some of the metals.

I had said before that we were mainly concerned about the cadmium, the chromium and the arsenic because once they get into a vapor form, they do become a problem that we need to monitor very closely.

Once we get the chemical data from the trial burn, I will be going through that kind modeling activity again and I do expect that we will give you a presentation based on the findings of the toxicologist who evaluates what are these emissions coming out of the stack and what do they mean in terms of public health and protection.

Another piece of the risk assessment that EPA

is required to do, and this is really based on the new EPA Administrator, Carol Browner's policy, that we actually will conduct an indirect risk assessment. And that means not only what about the people who are living out in the community, we are going to be looking at what happens to these particles as they fall onto the grass and as cows eat the grass and then cows producing milk and going down like a food chain type of thing.

Now, this is kind of new for EPA. We really don't have a real standard policy on how we are going do this risk assessment, but yet it's another major piece that we think is important and it's something we plan to do at this site.

So we'll not only look at the risk to the residents of this town for the one year that we are going to be doing the burning, we will also be looking at what are the risks long term after this incinerator is gone, what will still be the risks because of what we had actually done during the site operation.

So again, following trial burn, again Summer of '95, maybe Fall of '95, we will conduct another risk assessment and I will plan on coming back and sharing those results with the public, putting them in the repositories and things like that.

At that time I will also bring a toxicologist

who can really explain what it means and try to answer the questions a little more technical than I have capabilities for.

Another thing that we have been concerned about with the DER regulations is that they require what we call best available technology. So not only are we looking at what do the regulations require of incinerators, we are also looking at incinerators across the country to try to evaluate maybe there's a better way to do it, maybe this piece of equipment is not the most efficient piece.

Let's say the bag house which will collect some of the dust. Maybe the State will determine that there is another kind the bag house, air pollution control device that might be actually better to use. So we are doing it based on regulations and what we think is the best available technology; what is the best piece of equipment we can use.

Now, I have to admit that we have looked at some of the drawings that have been provided to us and I have talked to other incinerator experts within EPA, and I do feel that we are very forward thinking in requiring protection.

And what that really means is, we set a particulate emission rate, which means how much dirt is going to come out of that stack. The number that we

actually set is .01 grains per dry standard cubic foot. That is eight times more protective than the RCRA regs would require.

Now, the reason we did that initially is because the State required that of our specs and I saw no problem with that. But now when I look at it, I think this is really very good that we were that stringent on the particulate emissions because we are in a residential area. And by establishing that as our standard, I think that puts us in one of the most protective categories we could be for this type of industry.

And it is, in fact, even more stringent than the new EPA policies on what particulate emissions should be. I know that doesn't make a whole lot of sense just from the words, but the whole idea is, .01 is a very low number and that's, in fact, what we are going to be trying to achieve with this particular unit.

And in order to achieve that, they have actually designed it to have two separate air pollution control pieces as part of the incinerator. The basic idea for the incinerator is, you put the dirt in the first chamber, which is the rotary kiln. They will be heating that up to about 1,000 degrees.

It goes from there, the gases will continue to pass through and go through a secondary chamber which will

be operated around 1,600 degrees. Once it goes through the secondary chamber, it goes into the bag house which will collect the very fine particulates.

Going beyond the bag house, it goes into what we call a scrubber, a wet scrubber, which the water will also cool down the gases and further collect some of the particulates. So that is how they plan to achieve this .01 emission rate.

Now, the one thing I want you to be aware of, because we are using water as the last step of the air pollution control, you will actually see steam coming out of that stack. It is not going to be invisible. You will actually see the water coming out of the stack.

So there will be water coming out of the stack and there will be particulates. Based on the .01 grains, that requirement, we will be looking at about two pounds of particulate matter coming out of that stack each hour. And that is in light of the fact that -- which I didn't say earlier and I should have.

The unit that we are going to place on the site is actually a little bigger than I thought it would be in 1988 and it was bigger than I thought it would be in 1991. This unit is big enough to handle up to 60 tons an hour of contaminated soil. So for each hour we put in 60 tons of dirt to clean, we are only talking two pounds of dirt

coming out the stack. And not all of that will be contaminates and not all of that will be metals. A lot of it will still be dirt.

So I think that if you can, I don't know, do some mathematics to calculate how well this air pollution control is supposed to work, we really are, I think, very forward thinking in trying to make sure as little as possible comes out of that stack.

One thing I wanted to say about the trial burn is that within the Trial Burn Plan, the company has proposed a series of tests. They will actually be doing a run with this equipment using clean soil, okay, just to make sure that everything is connected right and that it's going to be working.

Then they will run a few rounds of contaminated soil as a shakedown to make sure, again, the unit is operating properly. When we get into the official trial burn, there will actually be a series of three runs.

They will put the dirt in and will run the unit to meet the requirements that we've set. We will take the data from all three different trial burn runs and we will use that to average it and then determine if, in fact, they meet the requirements.

So there is a period of time, it may take two months to go through these series of burns, but again, it's

not going to be the full production burn. Again, this is just to make sure the equipment works properly.

Let me just sort of go back and ask it, on the -- I didn't finish the different kinds of monitoring, did I? I'm sorry. So we've got the continuous monitoring to see if those parameters are operating correctly. We've got the chemical monitoring in the stack during trial burn.

We are also going to have air monitoring at the perimeter of the site. And that is the make sure that as we are doing the excavation, we are not dispersing contaminates into the community that are going to be of a concern. They will looking for all the different kind of chemicals in a whole series of different kinds of tests.

We are also planning to do what I call in-the-community ambient air monitoring. And the idea here is that we are going to set up four different stations around the incinerator but far enough away that the sampling will be done in areas where the particulates would fall down.

So it might be, I'm going to guess, it might be a mile from the actual incinerator. But we are going to be doing this kind of monitoring before we set up the incinerator to get an idea of what is the air quality; what is the chemistry of the air that normally occurs here in Lock Haven.

We are also going to be doing this in-the-community air monitoring during the one year that we are going to be actually operating the incinerator. So the idea here is to get a background sample, a base line sample, see what we have out in the community and then compare it to when we are operating the incinerator.

I think it's important that we do this, but I also think I need to explain -- we are going to have an awful lot of data. It's going to go through an awful lot of different chemicals and they are going to find concentrations of chemicals that are just normally out there based on the traffic on 220, based on other facilities, companies in town that have permits to release certain contaminants as part of their industrial operations.

So we are going to find something in the community. So my hope is that we will do this before we start burning, after we start burning, and then we can compare that data to see if, in fact, we've got any kind of problem based on what comes out of this stack.

The fifth kind of monitoring is actually done by the company or the workers on the site. They will have their own health and safety plan that will require workers to use certain level of protection. They will also require the workers to have monitors on their uniforms or whatever

they are wearing, so that as they are working close to the activities, the excavation or processing the dirt to get it ready for the incinerator, they will have a chance to see if there is any effects that the workers need to worry about and that the workers maybe should have more protection as they are going.

So I've got a number of different kinds of monitoring going on that you really just need to understand that there is all different kinds of it and that we will have these off-site monitors to show how the incinerator is working. But that off-site monitor will not show you chemical data coming out of the stack. That is only going to occur during the trial burn. But that data is, of course, something I can make available. Once I get a trial burn report, we can show you what they found when they did those measurements.

I just want to sort of stop here for one second, and I know it's hard, but I just want to see if you understand the different kinds of monitoring or if you have questions about just the kinds of monitoring.

MR. BOWER: I'm Ken Bower from Wayne Township, and I was wondering you say the ambient air and the air around there, but how high are we checking this air?

MR. SCHROCK: I think it's between two and seven meters off the ground.

MR. BOWER: Off the ground. I'm here to request that we have those monitors down our way, down Wayne Township way because of the air --

MR. SCHROCK: You sent me a letter. Yeah, I remember the letter. It's going to be determined by where we model and see where things are going to fall out. Okay?

MR. BOWER: And if they don't fall out with your trial period, which isn't -- the full chemicals are getting out of the ground, would that show the same amount then as it did when you get the trial test out?

MR. SCHROCK: We'll have data based on just what's in the community now, and then we'll have data based on when the incinerator is running. So that is what we are going to compare.

But again, the distance is going to -- I'm not exactly sure how far Wayne Township is. I know it's (indicating) downwind, let's say.

MR. BOWER: It's downwind.

MR. SCHROCK: But I'm not exactly sure how far that is. That might be a little further than we are going to be looking.

MR. BOWER: It is a little further than what you're looking.

MR. SCHROCK: Because we want to put it in places -- if there is going to be something falling out, we

want to put it in places where we would find it.

MR. BOWER: Yeah. But the air turbulence is awful high here at different times of the year and it carries a long ways, and that's our concern. Even though a lot of this is going to fall short, it will fall down our way. Most of the people down there are concerned about it, and that's why I came up to see about getting a monitor down there.

MR. SCHROCK: Well, that could happen. I won't say no, but I can't say yes at this point. We did take one full year worth of meteorologic data from the site. So I've got a whole year's worth of data that will tell me where the wind is going and how it changes. And I'm going to use that wind data to determine where I put them.

So when I get to the point where I know where they are, I'll remember and try and get back to you. If it's a possibility, if that is the kind of location we want to use, definitely I will get right back in touch with you, because I would like to really work with the townships and the local governments in placing these monitors.

MR. BOWER: You say only four you are getting?

MR. SCHROCK: Four in the community, right.

MR. BOWER: Do you think that would be enough?

MR. SCHROCK: Yes. We'll see the data. If we find something, then maybe we will have to add more. That's

one thing I said earlier, if, in fact, I think there's reasons to add more, there is a way I can do that.

MR. BOWER: I mean when you're checking it, like you are checking maybe a mile, you have them all out a mile, are you going to stop there or are you going to check further to see if it does drift further?

MR. SCHROCK: Well, to start off with, I'm just going to start with four. If I find a reason --

MR. BOWER: What I'm saying is, if you're checking one, like you say, approximately one mile. But if you're checking one mile down the road and you find nothing, so are you going to quit there or are you going to start moving closer back to Lock Haven or closer to the incinerator is what I'm saying? Or are you going to go beyond that to make sure that it didn't go any further than that?

MR. SCHROCK: There is a chance, but at this point I couldn't say what we would do. The intention right now is just to set up those stations and start collecting data. To move it around like that wouldn't give me a comparison as to what the background was compared to once we started operating.

But again, there is always the possibility. I can't -- you know. But until I start collecting data and know what I'm looking at, I can't be just adding 100 more

stations. Okay.

We do have the stations close to the site. We will have some in the community. If we need more, we can add more. But I've got to get through to the point where I know what I'm doing, what's the quality of air normally; is there a change with the incinerator based on where we would expect it to go. And then we'll determine if, in fact, we have to change things.

MR. BOWER: The question come to a lot of people down there, are we going to involved? Is there some way that I can tell them, you know, like you are to check, that we don't have to worry about it; it's not coming that way.

I mean they would like to see a monitor down that way even though it may not get down that far, but they would like to know that it's not coming down there; they don't have to worry about it.

MR. SCHROCK: When I get to the point that I can answer that question, I'll give you an answer to say. I honestly can't do it at this point. But how far is Wayne Township from here?

MR. BOWER: It's eight miles.

MR. SCHROCK: I'm not going to say that -- you know, wind is wind and it's going to disperse over a large area. But the further it goes, the less and less you are

going to see.

MR. BOWER: It may be closer to where your incinerator is going to be though. I'm talking Youngdale Road, down that way.

MR. SCHROCK: No. The incinerator is back there at the Drake Site. We know where that begins.

MR. BOWER: It's a little closer to the other part of our township down there.

MR. SCHROCK: But when I do that modeling and determine where we are going place it --

MR. BOWER: Just so that we can have something to tell the people that we don't have nothing down here; you don't have nothing to worry about.

MR. SCHROCK: I understand, but I'll have to get back to you on that one. I do have your letter from a while back, though.

MR. PEDLOW: I'm George Pedlow, I'm a Geologist in Lock Haven. During the trial burn, how heavily contaminated will be some of the soil that you use in the trial burn in order to determine what level of contaminants are being tested in the stack gases?

MR. SCHROCK: Okay. What I would like to see is that we use actual dirt from the site.

MR. PEDLOW: Well, that's one thing, but we all know that the contamination levels vary from place to place

on the site.

MR. SCHROCK: There is a variation, yes. But you've got to remember, just from the excavating and the sorting out of the rocks or whatever, there is going to also be a good bit of mixing of this dirt just to get it ready to feed into the incinerator.

If I were to make my guess is that we are going to be doing sampling of the stockpiles to have data before we feed it to the incinerator. But my understanding based on the treatability study back in 1990, we were finding that the concentrations of total organics were less than ten parts per million. So generally, the math in my head, ten parts per million, it's a relatively -- not highly contaminated. I don't know if that's the best way to say it; but we are not talking about extremely high concentrations.

AUDIENCE: Fifty pounds a day. How many pounds an hour?

MR. SCHROCK: Of dirt. Not all of those contaminants will be coming out the stack.

AUDIENCE: It's still 50 pounds of something coming out of the stack.

MR. SCHROCK: Yes.

AUDIENCE: Spread over a small area.

MR. SCHROCK: Square miles, but yes.

AUDIENCE: Roy, do you have any idea or does Rust have any idea at the present time what is going to be the temperature of the gases, steam, whatever, that is coming out of your stack?

MR. SCHROCK: Let me look and see if they know.

MR. HARRINGTON: They will be about 185 degrees or thereabouts.

AUDIENCE: 185. Do you have any data as to what height that that will rise?

MR. HARRINGTON: There's formulas for calculating that.

AUDIENCE: Yes, I know.

MR. HARRINGTON: But I don't know what that number is.

AUDIENCE: Is it a possibility that it could get up into the winds aloft?

MR. SCHROCK: You'd probably have to run the calculations.

MR. HARRINGTON: You'd have to run the calculations.

AUDIENCE: Which means that your monitors within the mile radius, two-mile radius, ten-mile radius will show nothing.

MR. SCHROCK: Well, no. These things --

AUDIENCE: Because if it gets up --

MR. SCHROCK: They will be dispersed.

AUDIENCE: -- into the winds aloft at different speeds, they are from different directions, as are surface winds, right?

MR. SCHROCK: Yes.

AUDIENCE: So this could be blown for miles and you could come back and say, well, our monitors are showing nothing.

MR. SCHROCK: There's still very good ways to predict where you would think that it would come down.

AUDIENCE: Where you would think?

MR. SCHROCK: Well, we have the year worth of data from the site. We do know what is going on right there. We are using that information.

AUDIENCE: But you had no data as to the height that what is coming out of those stacks, be it gases, or be it steam, you have no data available as to what height that that is going to ascend to, what altitude.

MR. SCHROCK: We'll have to look into that.

AUDIENCE: Also you have no data as to the direction of the -- you may have on the surface wind, but how about the atmospheric wind, and how about the winds up higher?

MR. SCHROCK: Well, we had a tower that was 30 meters. So we are not just talking just our level. We are

talking fairly high. But again, I'm not looking up a mile high, no.

AUDIENCE: Is it possible that these gases could go a mile high?

MR. SCHROCK: Well, they are going to have to do a calculation on it. I mean I don't have that today. I can look into that, though, and I can get back to you on that.

MR. HARRINGTON: Roy, when the modeling is done of the stack discharge, one of the things that is put into that model is the temperature of the gas and the velocity of the gas in the stack. So there is a prediction, a computer generated prediction of how high those gases are going to go before they begin to disperse out horizontally.

So that is included in this modeling that Roy has been talking about, that then predicts where the most probable point is to put the monitor. Do you understand what I'm saying? Does that make sense?

When you run the model, part of that modeling process is the stack gas velocity, the stack gas temperature, and the buoyancy factor of the stack gases, the composition of the stack gases.

So the model takes into account that the stack height is 150 foot high. And now due to the velocity of the gas, the temperature of the gas, you are going to get

another 30-foot rise, 60-foot rise, whatever that number is, and then the horizontal dispersion is going to take place.

So that is what the model does. It says the gas is being discharged here; (indicating) it's being forced up right now. When is it going to begin to flatten out. And when it flattens out then it predicts when it's going to come back down.

And then that is going to be used to locate the monitors in the community that Roy was talking about.

MR. SCHROCK: When I get to the point where I'm going to be doing the risk assessments, this modeling becomes very important, the dispersion model. I will bring the guy who does the air modeling here for that meeting so he can explain how it accounts for those kind of questions.

But I still will try and figure out some sort of an answer for you. I just don't have that today. That's why I've got her writing everything down.

AUDIENCE: Did you say that you will be monitoring the stack gases during the trial burn? I wondered why you won't be monitoring the stack gases during the actual operation of the incinerator.

MR. SCHROCK: That is really a very good question because I had to ask that one myself. The idea is that this chemical data is going to be collected during,

let's say an eight-hour period of time. Then those samples will be sent off to be analyzed.

I am not able to do real-time monitoring of the different chemicals. Okay. That is why we look at those few things that I can do real time continuous, and if, in fact, it stays within the same parameters that we have approved to operate, then we are going to be comfortable on the chemical aspect of it.

That doesn't mean I can't require maybe after six months we do another one. But the real answer is, it's not real time. It won't tell me minute by minute what the concentrations or the chemicals are. I need something that is going to tell me minute by minute if, in fact, this is operating correctly.

AUDIENCE: You say that there is a 99.99 certainty this will take the contaminants out of the soil. But has there any incinerator been proven to be 99.99?

MR. SCHROCK: Yes.

AUDIENCE: I understand there is none.

MR. SCHROCK: No. In fact, some of them have to meet 99.999.

AUDIENCE: I would like to have that in writing because I know they didn't in Arkansas at the Vertac Incinerator, the EPA lawyers were asked that question and they did not say that.

MR. SCHROCK: Let me explain. That's one -- that's probably one of the only other incinerators I know something about. In order to prove 99.99 percent, okay, I have to start out by putting in a thousand parts of something, and then measure to see that less than one goes out the stack.

At the Vertac site they were actually burning dioxins. And EPA chose not to add 1,000 parts of dioxin for that particular test. They started off with maybe 55 parts of dioxin and they didn't think it was productive to make it worse just to prove the 99.999.

Actually that dioxin is like six 9's, so they would have had to add 10,000 parts when the soil isn't that contaminated.

AUDIENCE: But the question is, this was in a hearing after the burning, the question asked of the lawyer was, has EPA -- is EPA confident that this can be reached, and the EPA people had been saying for years that it was. But this fellow was under oath and was a lawyer and he chose not to perjure himself and said no, we haven't been able to prove it.

MR. SCHROCK: Well, at the Vertac site they didn't prove it because they didn't want to add contamination of that level.

AUDIENCE: I think that's historical, ever, had

they ever.

MR. SCHROCK: Well, again, that is the six 9's, too. It doesn't really make a whole lot of difference to you, but the four 9's, 99.99 has been proven.

AUDIENCE: I understand that there were eight incinerators tested for four 9's and none of them had come out any closer than 99.96.

MR. SCHROCK: All right. I'm not an incinerator expert; but I am going to have to go back and check up on that one again. I had hoped to have somebody here that could answer that immediately, but I wasn't able to get them today. But I will check into that.

AUDIENCE: You seem to put a great deal of confidence in that 99.99 DRE. Just to reiterate a little bit what Gill just said, the question asked was, can you tell us any incinerator anywhere in the United States that have achieved 99.99 DRE, and he admitted that they could not.

Furthermore, you talk a lot about trial burns as though that is going to give this community some degree of confidence. You all might like to know that the WTI Site in East Liverpool, Ohio failed every trial burn and has been given the go-ahead nonetheless.

So that shouldn't give you a great deal of confidence in EPA protecting you from health risks. I

would like a response to that. You must certainly know that WTI has failed the trial burns yet they are still -- they have been burning commercially for years.

MR. SCHROCK: To be truthful, I don't know that much about WTI other than I'm aware of where it is and that it has been very controversial.

MS. NURSE: I just wanted to say something about WTI very briefly. I mean what we are talking about is site specific treatment of waste, and the WTI situation is a commercial operation and a commercial waste incinerator; it is a very different scenario.

And also because of the history of the way this site has been managed, then we have gone through all of the various regulatory processes and in establishing such things, for example, as various -- we have four? We have four additional repositories, so that the process at this site has remained open.

So that if we get to that point and we find data that causes questions, this is the kind of forum in which we continue to discuss that. I don't know if you have been present at any of the other meetings, but this is something that we will continue to keep open and discussing with the public. And I understand that there were some questions about how that was handled at the WTI site in terms of the public having access to certain data.

And that has never been the case at this site because we have managed to place all the documents, both the technical data as well as in this case the bid documents themselves, so that anybody can come and review those documents and raise the kind of questions that you are bringing up this evening.

MR. SCHROCK: Let me make one more comment on the four 9's. The reason that I have to prove four 9's is based on the RCRA requirements. My real concern is the chemical data of what is coming out the stack based on the real dirt at the Drake Chemical Site.

My judgment of pass or fail is not tied to a particular number. It's going to be tied to the concentrations we find coming out the stack. I have also had to place additional requirements on what concentrations will remain in the ash.

I know this is a little more complicated than I need to get into, but yet if -- you can have your 99.99, you can meet that if you leave everything in the dirt before you treat it. If nothing goes up and it all stays in the dirt, you can you meet that.

So I have had to add additional requirements on the dirt that is being treated to make sure the dirt is, in fact, clean, and we are going to prove the 99.99 because the RCRA regulations require me.

And in order for me at the Drake Site to prove those four 9's, I am going to have to add two different compounds, naphthalene and 1-4 dichlorobenzene. And those will be the two chemical compounds that I will try to prove the four 9's on.

But again, those are really going to be higher concentrations than I normally find in this dirt. We chose not to add the beta naphthalene because it's a very risky substance, so we are substituting naphthalene for that.

When I do get the trial burn data, again it's going to be public. If I don't meet it, I'll have to stand up here and say that again. So, I mean, I understand your point, though, about the other facilities. But it is my understanding that some of them have met the four 9's.

AUDIENCE: I would like really like to see that in writing.

MR. SCHROCK: Okay. I will try and get that.

AUDIENCE: I will give you my address.

MR. SCHROCK: Okay.

AUDIENCE: I have three real quick and easy questions. The first one is, when you first started talking about monitoring, you said that there will be a continuous monitoring of the incinerator; one that's properly working.

Does that mean every day that it's working?

MR. SCHROCK: Every single day, every single minute.

AUDIENCE: For the whole year, 24 hours a day?

MR. SCHROCK: Yes.

AUDIENCE: And who is doing that continuous monitoring; is it EPA or the company?

MR. SCHROCK: The company will do that.

AUDIENCE: So we are letting the wolf watch the hen house?

MR. SCHROCK: Well, we are going to have the data to look at afterwards. It's going to be printed, we will be able to see it. I'll also have it out in the community so that anybody in town can go look and see if, in fact, it is really meeting the requirements.

AUDIENCE: That is assuming -- I don't know anything about this company and I'm not making any slanderous accusations --

MR. SCHROCK: No, I understand.

AUDIENCE: -- but in my dealings with other companies, like WTI, I wouldn't trust their figures for anything, and I'd feel a whole lot more comfortable if EPA or DER was monitoring that also.

MR. SCHROCK: We will be able to monitor those --

AUDIENCE: As an after effect though.

MR. SCHROCK: Well, like I say, it's real time. We are going to have that sitting in the community and at the site. Anybody walking in there with -- into the site or anyone who is out here in the community should be able to see if, in fact, they are meeting the requirements.

AUDIENCE: Okay. Second question. You were talking about first they are going to do a trial burn of clean dirt.

MR. SCHROCK: Yes.

AUDIENCE: And then they are going to actually burn some contaminated dirt before the real trial burn.

MR. SCHROCK: Right.

AUDIENCE: Is that interim, that first burning of contaminated dirt, going to be monitored?

MR. SCHROCK: Yes.

AUDIENCE: Will the public be told before this is going to happen?

MR. SCHROCK: Yes.

AUDIENCE: So we can leave town if we want to?

MR. SCHROCK: Yes.

AUDIENCE: Third question. You said a few minutes ago that you were not an incineration expert?

MR. SCHROCK: Right.

AUDIENCE: Why are you the project manager?

MR. SCHROCK: My job is basically to coordinate

all the experts, including groundwater people, toxicologists, incinerator experts. I represent the government to coordinate the people who have the expertise, and then my job is to understand it so that I can then explain it to the public.

But I don't want to pretend that I know everything about incinerators. I, again, hoped to have somebody who is a real expert on incinerators here tonight, but it just didn't work out.

AUDIENCE: Can I ask one more, number three?

MS. NURSE: Yes.

AUDIENCE: I find it real interesting that in September of '93, the contract was awarded to this company and in the same month EPA proposed considering replacing this technology, burning, with alternatives or best available technology, which included some kinds of things likes bioremediation, the carbon filtration and so forth.

If EPA came out with that statement in the same month that the contract was awarded for this project, aren't you already outdated on this project and isn't EPA actually looking at newer, better alternatives?

MR. SCHROCK: The agency does believe that there should be other ways to treat contaminated soils in sites. The problem at this particular site with the bioremediation or soil washing is that we would not be able

to achieve the cleanup level which EPA would think is protective.

By using this technology, we believe we can treat the site so that when we are done with it, we can basically walk away and not have to worry about that site again. Bioremediation generally leaves -- again, I'm not an expert here either -- but that would leave, I'd say, ten percent of the contamination that is at the site.

So I could spend millions of dollars and still have contamination there and still have to restrict any use or access to that piece of property. So it's really the cleanup goal that makes a difference in the technology.

We have tried to use bioremediation at this site to treat the groundwater and because of the high concentrations of Fenac, which is a herbicide, we are finding that we are not getting rid of the contaminants by any bio methods.

The other aspect is that the beta naphthalene which is the real risk -- the highest risk at the site, the risk levels for that are tremendously low, in the parts per trillion range if, in fact, humans were to start eating the dirt or drinking the water.

So we have decided to try and set technology to lower -- to destroy that concentration, to put it down into a safe level. And, in fact, we have set criteria for the

ash at 55 parts per billion because if anybody were to come in direct contact with the ash, it would still be protective.

We realize that at some point if somebody wanted to use this piece of property, and that is one of the questions that I got, EPA does now have a policy that would allow for use of that site and a release from the liabilities since we are spending so much money, if anybody bought it, we would want money from them.

We actually could now reach an agreement with somebody that if they did something for the government, the government would say, all right, you can use this property without having to worry about a $5 million debt that would be attached to this property.

So again, the reason this technology is used by EPA under the Superfund is, we want to be able say we have destroyed the contaminants and we're walking away; it's protected now.

One of the other questions has to do with why don't we use the same treatment that AC&C is doing. And here it's really the same kind of an answer. Their cleanup level is at 1,000 parts per million and we are looking at going well below that.

So that again, our cleanup level is such that we can be able to walk away and say EPA Superfund is done

with the soils at the site.

AUDIENCE: Would this site be clean enough to put a high school there when you are done?

MR. SCHROCK: It's probably not big enough for a high school.

AUDIENCE: How about a day care center then?

MR. SCHROCK: Well, right now it's zoned industrial.

AUDIENCE: I'm just curious. I really am.

MR. SCHROCK: I mean, you know, if somebody wanted a release from liability to put a day care center there, I would probably make them do something to ensure that whatever the barrier is between their facility and --

AUDIENCE: The reason I ask that is just to see, how clean is this site going to be when you are done?

MR. SCHROCK: Well, technically it is a possibility. Okay. But right now it is zoned an industrial area. I would expect that that zoning is not going to change.

But in reality, that is what I said, EPA is making it clean enough to walk away from. But if somebody is going to build there, they are going to end up coming back to EPA, and that is when I'm going to have say, all right, if you are going to do that, then you've got to do -- instead of giving me money, you are going to have to

ensure protectiveness in some other way. So I'm not saying you couldn't.

AUDIENCE: You said that we are going to share some of the knowledge that we gain here with other incinerators in the future, is that right, coming on eventually we'll be sharing some of this information?

MR. SCHROCK: All of our information will be public, yes.

AUDIENCE: Then why don't we have an idea where to place these monitors for the particulate fallout?

MR. SCHROCK: Well, we do. But you have to judge it based on the wind at the site. That is why we collected a year's worth of data.

AUDIENCE: So you are just saying somewhere we are going to have four out here maybe a mile. You have no idea really, right?

MR. SCHROCK: Well, it's not up for me to say that now. I've got to go through the actual data that we have collected and then use that to place the stations.

AUDIENCE: Another thing, since the '72 flood, this town has literally been torn apart. Do you feel they were making intermediates or Agent Orange out here since you said there's a lot of pesticides?

MR. SCHROCK: No. Actually I've thought about that a number of times. No. The Fenac that was produced

has some similarities, but it wasn't an Agent Orange compound and it did not -- the process that we used was not one that would have created dioxins because they basically didn't have the extra oxygen molecule.

AUDIENCE: Okay. But for some reason the Federal Government came in here since '72 and tore the place apart. I have seen that myself being here that long.

MR. SCHROCK: My piece is really only that site.

AUDIENCE: Okay.

MR. SCHROCK: But no, I do understand some of it.

AUDIENCE: I have a question. I would assume that the EPA is here to protect our health. In other words, when the site is clean, we are safer; am I correct? Is that part of the idea for your being here?

MR. SCHROCK: Yes.

AUDIENCE: I have two studies, one a copyright retained by the U.S. Government from the Archives of Environmental Health, 1984, long before we got to a final decision on this site; and also one from the Journal of Occupational Medicine, reputable doctors -- if anybody wants to look at them they can -- who have studied this site and have said that as we sit in this building or anyone who lives around the site is at low risk from the

site.

In other words, there is no significant risk to our health -- or to our health from the site. I wondered if you were aware of these studies and if you agree with them or not.

MR. SCHROCK: It's on my list of questions. I am aware of those studies, but I'm not exactly sure authors and if it's from the study that I know that I have had contact with.

The Pennsylvania Department of Health and the funds actually came from the Superfund to that agency, has done a study of people who live in Lock Haven and looked for the exposure to beta naphthalene. And the conclusion is that there is virtually no risk to the community.

The only problem I had with that study if, in fact, they are referencing the same data, is that the requirement to be part of that study was that you lived in a radius of ten miles from the site.

So basically anybody who lived in Lock Haven could have participated in that study. That is not necessarily the homes that were downgradient, downwind right there that were demolished in the '72 flood.

So I don't disagree with the study, but I just want to point out that the population that they used might not necessarily be close enough to have the effect.

And there is no question that the greatest risk is from eating this stuff, and the people who worked in those companies were the ones that got the exposure to the point where it really made a difference in their health.

But the Superfund laws, the way we are expected to implement, is that there is a potential risk from this site; and based on the risk of the beta naphthalene, it is a very high risk should somebody come into contact with that site and drink the water, and particularly drinking the water would be extremely dangerous.

AUDIENCE: One more after this. After the site is cleaned up and EPA leaves the city, we still have approximately -- and Mr. Pedlow can help out -- this Drake Site, these chemicals were dumped throughout the city. They weren't just in one place. There are other sites.

Therefore, the groundwater could be treated for a thousand years -- thirty won't be enough -- a thousand years and the contamination from the additional sites which aren't being looked at because they're not yet Superfund sites will continue to contaminate the groundwater. Do you agree with that?

MR. SCHROCK: We have talked about some of these other sites in this meeting and several others. To my knowledge, DER has looked at some of those locations and has determined that they are not going to make the

Superfund list. All right.

I don't know what kind of chemicals are in those particular sites, if it was beta naphthalene or something else. So I really don't have a good idea.

The idea of how long it will take to clean up, yes, I believe thirty years is maybe not long enough at this particular site. The concentrations at the Drake Site and between the Drake Site and Route 220 are, in fact, so high that it is really one of the riskiest sites we have in Region 3, which means the groundwater is one of the worst places in Pennsylvania.

But I think we also have an obligation to go through a period of pumping and treating it to try and see if we can decrease it. And the way EPA would approach this is, year by year or every five years we would actually look at the data, are we making a difference; are we actually getting the stuff cleaned up? I think we need to evaluate as we go, is this having a good effect.

AUDIENCE: So you are not actually committing the EPA to complete cleanup. In other words, you are admitting -- and I have some studies that say pump and treat are questionable. There are people in the EPA that believe now that pump and treat might not be the best technology to do over a period of thirty years, which is the plan. Based on that, there could be -- the question

is, you can't be sure then that you can clean this site.

MR. SCHROCK: The way EPA has written their record of decision is, our goal is to decrease the concentrations so that they would be within drinking water standards. So that is a goal.

But again, I've said that we are going to have to evaluate as we go. Now, thirty years comes from the RCRA requirements that a facility, if they have contaminated groundwater beyond their property, must implement this pull back of the contaminated groundwater and treat it for a period of thirty years.

So thirty years is really out of the other laws. The Superfund has sort of attached to the thirty years, but it's not necessarily a requirement. The State of Pennsylvania, on the other hand, does take the position that yes, in fact, you know, if you are the company that contaminated this, we want you to clean it up until it's background, which means zero.

Whether it can be achieved or not, I have other sites where you have contaminants that are heavier than water and they are sinking and they are finding pockets in the underlying clays or whatever kind of soils, that yes, in fact, they may be there forever, or at least beyond our lifetime.

But again, at this particular site, I think EPA

has an obligation to implement a pump and treat program and to see how much we can clean up.

The other factor, and this one of the driving reasons behind digging up the soil and incinerating it, is we feel that the Drake Site, this is based on historical photos, is probably the main source of beta naphthalene in the groundwater.

In 1963, that entire site was covered with lagoons. And it was in '62 that they stopped production of beta naphthalene at the site. That was when it went over from Fieldstone to Drake.

But based on, you know, knowing that that entire site was filled with lagoons, I do feel that is our main source of the beta naphthalene. So if we get that out, then we have a better chance of trying to clean up the groundwater.

AUDIENCE: I'll take you off the grill

AUDIENCE: I would like to correct you. That wasn't 1962 when it went from Fieldstone to Drake. I'm not sure of the exact year, but I'm positive it wasn't that year. I believe it was probably in the late '60s, or at least the mid '60s.

MR. SCHROCK: Actually, I think you are right. I think it was about '65 -- it was '62 they stopped producing beta naphthalene supposedly.

AUDIENCE: I have a question. On the monitoring, you said something about you're going to test cows and their milk and I presume people, and wanted a risk assessment; is that what you called it?

MR. SCHROCK: Yes.

AUDIENCE: And you said that you were going to report on that in the Fall of '95?

MR. SCHROCK: Yes.

AUDIENCE: And you were going to start the burn in the Summer of '95?

MR. SCHROCK: Well, we will do the trial burn in the Summer of '95.

AUDIENCE: When does the burn of the contaminated soil start?

MR. SCHROCK: After they get the full approval.

AUDIENCE: Which is I thought you said that was also going to be in the Summer.

MR. SCHROCK: No. Basically I would have to do those risk assessments before I give a full approval. I would hope to even be able to collect some of that risk assessment information, the chemical information, even prior to those little mini burns, as I call them, using the real dirt, not spiking it, get the chemistry and then start those calculations.

And what it was called is an indirect risk

assessment, as if it were passed through a food chain. So I would need that data before I could give full approval.

AUDIENCE: I'm confused about something. If I think I heard you right, the trial burn soil will not contain beta naphthalene; is that correct? In other words, during the trial burn you are going to use soil that is clumped with another chemical that would be replacing the BNA that's in the real soil?

MR. SCHROCK: We will be using real soil and it will have the BNA in it.

AUDIENCE: In the trial burn?

MR. SCHROCK: Yes. But I'm not going to add BNA during the trial burn.

AUDIENCE: Okay. But you are going to add something else --

MR. SCHROCK: Yes.

AUDIENCE: -- to bring it up to the level that you need in order to -- okay --

MR. SCHROCK: In order to prove the four 9's.

AUDIENCE: Okay. A second question. I think you said there will be two pounds per hour of dust emitted; that is the allowable limit on this. How often will you analyze the dust?

MR. SCHROCK: Basically during the trial burn. That's when we do the chemical collection, sampling and --

AUDIENCE: So the dust that goes out the stack, some of that dust will be collected, and you are going to analyze that for what?

MR. SCHROCK: The different kinds of chemicals, volatiles, semi-volatiles, dioxin, the nitrogen oxides.

MR. PEDLOW: Metals?

AUDIENCE: Cadmium, chromium?

MR. SCHROCK: Metals, yes.

AUDIENCE: Just one and that is during the trial burn, right?

MR. SCHROCK: Well, it will be probably a total of ten times during the trial burn, I'll do sampling.

AUDIENCE: But not during the operation of the incinerator?

MR. SCHROCK: It will not be a normal part of the operation, no. That doesn't mean I can't require additional, but, of course, I would have to pay for that, too. Which if I need to, we will.

AUDIENCE: We pay for it, not you. We do.

MR. SCHROCK: Well, I put the money into it. I just move the money. But it does come out of the Superfund, which is really a tax on the chemical industries, even though we pay for products in the long run.

AUDIENCE: Do you have enough money saved since

it's been reduced from 120 million --

MR. SCHROCK: I have saved it.

AUDIENCE: -- you should have enough to give us a few more tests during this.

MR. SCHROCK: I have saved enough money to do that.

AUDIENCE: I think you could do a few more tests.

MR. SCHROCK: I probably will. How many will depend on what I will see.

AUDIENCE: Once a month can't be too bad.

MR. SCHROCK: Possibly, I mean I'm not going to say no. But I've got to see what I have first to know what kind of a problem I might be in.

AUDIENCE: At one point this evening when you were talking about health and safety training for the community.

MR. SCHROCK: Yes.

AUDIENCE: I think you said if something should happen, that's why the people would need to be trained. What kind of scenarios could you envision being an emergency situation?

MR. SCHROCK: Somebody gets their hand caught in the equipment and rips their hand apart, we've got to get an ambulance to come in and pull them out. They still

need to be health and safety trained just to go into the area to carry somebody out. All right.

All I'm really saying is that I want those kind of people who are responsible for emergencies in the county to have the ability to go in should something happen. All right.

In terms of, you know, the operation of the unit, if it's not operating properly, if one of those parameters goes outside of the official reason, you know, numbers that we expect to see, they basically have to shut down the unit.

If the temperature is too high, the unit shuts down. So, you know, I basically am not anticipating that I'm going to have a mechanical problem that will create an emergency.

I'm more talking about the workers, somebody gets hurt within the boundaries of the exclusion zone, I just don't want people to say, no, you can't go in, when it's their job to provide that kind of help. That is the real reason.

Also, local officials who may want to go in just to see what it looks like, I don't want to say, no, you can't go in there because you weren't trained, you know. So it's more to just provide the ability to go into that exclusion zone so that they can do their jobs.

MR. LAPP: Okay. My name is Frank Lapp, I hail from Wayne Township. Despite the fact that there is activity going on right as of at least this week at the Drake Site, there has been no clean area established yet so ever as far as for the people who work with the vehicles. When is this going to be done?

MR. SCHROCK: That would be done as part of our first operations this summer.

MR. LAPP: Do you have people on it now? Like I said, this should have been done before anybody actually goes on the site.

MR. SCHROCK: As far as I know, all of this activity is outside the fence.

MR. LAPP: Nobody has gone to the motels, ate at restaurants and whatnot?

MR. SCHROCK: Well, of course they have, but they have been in areas outside the fence and they are wearing protective clothing, which doesn't go with them, into the restaurants. That stays on site, and, in fact, there will probably be a drum of clothing left at the site when they are done this week.

MR. LAPP: I should hope so. Okay.

We talked about this earlier, you also said a contingent plan has been made for those work persons that may suffer from toxic exposure for future compensation for

death from exposure at Drake; am I right about that?

MR. SCHROCK: EPA is not going to tell a contractor and their workers how they must protect themselves. That is really a matter between the company and their workers.

MR. LAPP: You referred to this as public safety. Are those workmen not the public?

MR. SCHROCK: Well, yes, they are. But there is a different safety for requirements of workers there than there is for public. There are two sets.

I don't control the specifics of when they have to put on a respirator. They are the ones that have to be out there doing the monitoring and tell their own workers when to upgrade their own personal protection.

MR. LAPP: But on the same token, you said you are going to screen some of the animal life and do a profile on them down the line after the burn, etcetera?

MR. SCHROCK: Yes.

MR. LAPP: You referred to it as --

MR. SCHROCK: Indirect.

MR. LAPP: -- a chain of event. Yet you have no plans to do that for the work persons that's on the site?

MR. SCHROCK: Well, they all have health and safety monitoring. They have to have the training and

everything before they start working there.

MR. LAPP: But you are not going to do any long-term study to determine if there is added risk to workmen working in these situations?

MR. SCHROCK: That is not currently part of the project. Now, the studies that he is referring to in terms of exposure, there are ongoing studies to those people who used to work at Drake and AC&C.

If that agency wants to continue that study with these workers, you know, that's fine. But it's not currently part of my project.

MR. LAPP: But in a worst case scenario, say everybody died that worked at Drake on the cleanup site, what would EPA's responsibilities be?

MR. SCHROCK: I don't know, that is a tough one. I mean...

MR. LAPP: That's all I have.

AUDIENCE: At the first meeting I believe you had, you said that there was a possibility of putting a pavilion over the site when you work on it. The reason I ask this, I'm like five blocks from the site. Okay.

The guys inside the fence are going to have protective suits on probably, and I'm only five blocks away. And when you are in there digging stuff up and the dust is stirred up and everything, is some of that dust

going to drift out of the fence up five blocks to my house?

MR. SCHROCK: We do have that perimeter monitoring to tell us --

AUDIENCE: Perimeter monitoring -- well, I don't know, I'm not worried about a perimeter monitor. I'm worried about if you are going to come up and measure it over at my house. I'm five blocks away.

MR. SCHROCK: That's going to tell us if it's going. They are also responsible to control that dust. If they have a dust problem, they should do something to stop that.

AUDIENCE: If I remember right, I saw pictures here in this room over certain areas where you're digging and processing the dirt.

MR. SCHROCK: There are sites that they have done that, but at this sight --

AUDIENCE: They are not going to do that here?

MR. SCHROCK: We are not building a big tent over the entire site.

AUDIENCE: Well, I don't mean over the entire site. I mean the site you are working on right at the present, if you are working in the eastern end of it, is that going to protect the western end of the site or whatever?

I'm just kind of curious to know, is there

going to be dust flying up and what kind of equipment are you going to use to dig this up with. Are you going to be out there with a bulldozer shoving stuff around or --

MR. SCHROCK: I would imagine.

AUDIENCE: -- is it a man with a shovel or what's going on? Are they going to dig it up and put it inside the incinerator?

MR. SCHROCK: There is a feed preparation building, okay. Once they have it dug up, it will go into an area because basically they want to keep it dry.

The wetter the soil is, the more energy it is going to take to burn.

AUDIENCE: The dust is in it, too, when it's dry.

MR. SCHROCK: That will be enclosed and the feed preparation going into the incinerator will be in an enclosed building with negative pressure, whatever it is, controlled to keep the dust inside, as well as the ash after it comes out, will be stored inside these bins within the enclosed building under the negative press

So yes, they have made a substantial attempt to control the dust. But I'm not talking about a big balloon over the entire site.

AUDIENCE: No, I didn't think that. That's not what the picture shows when you showed us pictures of that.

But I just wondered if there is going to be anything escaping.

MR. SCHROCK: Like I said, we are going to have to be looking for that and they are going to have to provide that kind of dust control for anything leaking.

AUDIENCE: Okay.

AUDIENCE: Can you tell me why there couldn't be independent testing for some of the particulates coming out of the stack? Why do we have to depend on a computer readout that we totally have to trust the company that is doing it?

Why couldn't we have an independent contractor, not the company, not EPA, not DER, just spend a few million to have somebody test that and get the results from them. They are not paid to monitor results.

MR. SCHROCK: Let me ask. Are we splitting samples from the stack gases?

MR. ZUKOW: Yes.

MR. SCHROCK: We are going to be splitting samples and sending them off to another lab?

MR. ZUKOW: An independent lab.

MR. SCHROCK: Right. But I think it probably --

AUDIENCE: Are those results going to come back immediately as it gets sent out or --

MR. SCHROCK: No. The chemical --

AUDIENCE: -- will they come out down the road?

MR. SCHROCK: Yes. The chemical data is not real time. That will have to go to a lab; they will do the analysis and send back the results. But the company will be analyzing and we are going to split samples to a Government lab to do the same analysis on the same sample.

AUDIENCE: When will they -- what kind of the real time are we talking about?

MR. SCHROCK: I think we are looking probably at at least thirty days after we collect the samples to get the data.

AUDIENCE: How can we believe what's coming out or what they say is coming out is correct if it takes thirty days for the lab to do it? How do we know that what they say is coming out then right at the real time --

MR. SCHROCK: No. Their samples take thirty days, too, and they are going to stop after the trial burn. Once they finish the trial burn, they stop until I get the data.

AUDIENCE: Well, then I'm confused. I don't understand this computer thing that I'm reading out. It doesn't have anything to do with it; it has something to do with what was tested thirty days ago?

MR. SCHROCK: The chemical monitoring in the

stack as part the trial burn will take thirty days at least to get the data. The continuous monitoring, real time continuous will only be on things like carbon dioxide, oxygen, carbon monoxide, temperature, flow rates.

It will be a limited number of parameters that just tell me if the machine is operating correctly. That is real time. And that's why I can't do chemical real time.

I can't collect it and analyze it instantly. So yes, but they will shut down after trial burn. I'll look at their data. I'll look at the Government data and then we'll see if, in fact, we are getting the same kind of numbers.

AUDIENCE: What do we know about this company and the company that owns this company and the company that owns that company? My community experience has been that as you dig deeper and deeper into the layers of corporate ownership, you find a great deal of white collar crime, possibly even some convicted felons or worse. And I don't have a great deal of confidence in these waste companies, so what do we know about Rust?

MR. SCHROCK: I was prepared for that question, so I have asked Gary Jones to give us somewhat of an answer.

But before I let him actually say that, Rust is

a company that has a history and ownership up and down and past and some of their past projects with incinerators have been very successful.

They have done a number of Superfund sites, a number of private sites, and they do have the experience.

Okay, now as far as white collar crime --

AUDIENCE: What about environmental violations? That is the important thing, repeated violations.

MR. SCHROCK: I think I'm going to have to have Gary get up here and give some sort of an answer to that. But I mean there is no question, every company in the waste business has probably had violations; so I'm not trying to hide that.

I don't have those kind of specifics and I feel it's really their job to explain that.

MR. HARRINGTON: I'm Tim Harrington, by the way, and not Gary, but I would like to answer that. Because Rust is a company that's been around for a long time.

I think, as you implied, there are some ownership interests of Rust's. It started back in the late 1800's, started out at Pittsburgh, owned by two brothers by the name of Rust.

It's been headquartered out of Birmingham, Alabama for quite a few years of this century. Of recent

time, it is presently owned by two companies, predominantly by two companies of about equal ownership, one of them being Wheelograder out of New Hampshire and one of them being Chemical Waste Management.

The issue that you brought up of -- the issue you brought up of how companies handled -- or how a project is run, you've got to look at the people that are running the project; the folks, not the company.

Personally, I have been in this business and -- and not with any of the other predecessors other than the Rusts, but I have been in the business with other companies for fifteen years doing this kind of work, very successful projects.

I have executed throughout New England, throughout this part of the company, thermal projects going back as far as the 1985 time frame. And you have to look at the people that are on the job.

And the issue here is the credibility of the individuals. You know, companies, as everyone knows, a lot of us here have worked for companies. Companies are nothing more than an amalgamation of the people that are in the company and the morals of the person that is in charge of the job.

And I have -- you know, when I come to this job, we will run the job properly. I know the man over

here worried about the issue of dust and his house being close, you know, I can appreciate his concerns, that he lives close to the site. And I think he has pointed out an issue that is probably -- in all my experience on these sites, is probably the biggest issue and that is controlling the dust from normal operations on the site.

It's not that little bit of dust that Roy talked about that might be in the stack. There is a much bigger risk of the dust when we actually dig and move the dirt.

You know, I think another three gentleman asked a while ago about the people that are on the site. I have a great concern for the people that are on the site. We are very careful that we provide the people we have on our site -- when I am in charge of a site, every possible protective measure. We do monitoring on those folks.

We are going to be using on this site a fairly new technology that monitors for these amine compounds that are the issue at this site so that we can tell what their exposures is because they are skin absorbing materials.

So I think what you have to ask yourselves really is, do you feel comfortable with myself and with Gary Jones, because forget the name of the company or forget whoever the stockholders are in the company, we're the ones that are either going to make this a successful

project or not.

AUDIENCE: I have a question.

MR. HARRINGTON: Sure.

AUDIENCE: I think all you fellows are good, clean cut, honest people with a good deal of expertise, but I want to know, what are you doing consorting with known criminals?

MR. HARRINGTON: Known criminals? I don't know. I don't know any of them, I guess, so I guess -- am I consorting with them?

AUDIENCE: Consorting with them. Where is that initiated?

AUDIENCE: Are you not owned by WMX then?

MR. HARRINGTON: I don't know what WMX's ownership of Chem Waste is.

AUDIENCE: It used to be Chem Waste.

MR. HARRINGTON: They have some ownership of Chem Waste. I don't know what that percentage is. You can see I don't really -- I don't know what that is. It is an ownership interest though.

MR. SCHROCK: Now, one other factor I want you to remember is that the Corps will be on site all the time. They will have the ability to shut down if they see something improper.

DER also has the ability to come in and inspect

and to shut down that facility should they find something improper, and even EPA will also be able to come in and point this out to the Corps and shut things down.

So yes, we are probably going to have a reportable incident that something must be notified to DER concerning operations, but that is not necessarily a violation. Okay. If we see something that is not correct, we can shut them down and make them fix it.

AUDIENCE: Isn't there going to be an inspector, an independent inspector on this place all the time or are these people just on their own?

MR. SCHROCK: The Corps will act as my all the time inspector. The Corps does have a subcontractor with incineration expertise that will assist them, but they will not be there full time.

AUDIENCE: They won't be there full time?

MR. SCHROCK: No. The Corps will be there full time. They will have residents --

AUDIENCE: In other words, this is going to be monitored by an independent operation other than these people?

MR. SCHROCK: Right, the Government.

AUDIENCE: Roy, to go back a little bit, heading back up on your EPA's involvement in the Drake Site, in some of the guarantees that we have gotten, you

awarded a contract to a company from Ohio to come in here and demolish the buildings on site and clean up as far as anything above the surface.

While they were in here, one of their workmen turned a hose into an oiling tank and caused an explosion. Now, if you would have had your monitors in Castanea Township, your monitors would have shown that there was no explosion because Castanea Township did not get a drop of that. Woodward Township in the lower end of Lock Haven is where the cars were painted and the houses were painted.

EPA also let a contract with the assurance that as you cleaned up that leachate stream going through the park area in Castanea, that the hauling route would be continuously monitored. You would have a water wagon on that hauling route during the hours of hauling. If he made one trip a day, it was fortunate.

You also stated that at the end of every haul, the trucks would be completely washed down on the Drake Site where you were hauling the leachate material to. That whole hauling route was a dust cloud from an hour after hauling till quitting time.

I mentioned it to you, you said yes, that was not a very reputable contractor. They will never do any work for EPA again. The damage was done.

MR. SCHROCK: The only time they were digging

and hauling hazardous waste was from inside the Drake Site of 220 and there was only a pile about (indicating) this big.

Most of that dirt was clean fill brought in to cover up the leachate stream down through Castanea.

AUDIENCE: The leachate stream was dug out completely. So many feet on either side of the stream --

MR. SCHROCK: Well, but they didn't haul that all back to the Drake Site. They dug it out to put in the sewer line. Yes, they did do some digging there, but that stayed and then was covered. That was not hauled back to the site, only one area where they couldn't get low enough.

AUDIENCE: That's what left our park area down the creek road, over Paul Mack Boulevard, up Walnut Street and out to the site, with something in them.

MR. SCHROCK: Like I say, there was only one area that I know that we actually dug contaminated soil to bring back to the Drake Site. If they were digging and hauling from down at that end, it should have been clean dirt.

They were not charged to dig anything out on your side. But they did have a lot of trouble getting the dirt there and the clay, making the clay non-porous, and that is why we ended up with the pond there.

But if they were digging and hauling back, they

had to be digging it to mix it with the bentonite to make it a certain permeability. Because there was really only one area and that was inside 220.

But I do understand that there was a dust problem at that point, and believe me, my DER counterparts have brought this up on every review of every document, that we definitely need to have dust control and one or two times a day may not be enough to keep that controlled.

Now, we don't expect to be doing any kind of hauling back down in your end. But they will be bringing in clean fill to replace the corridor where the sewer and water line are and to fill in the area where they want to build the incinerator. And they will have a decon pad to wash off these trucks after they go in and out. I can only hope we do it much better this time.

AUDIENCE: Why will there be any trucks going in and out once everything is on the site?

MR. SCHROCK: Well, bringing the dirt in, bringing in clean dirt to fill up. They also have to put two feet of clean soil at the bottom before they put the ash back in. All of the trucks that have contaminated dirt in them should stay within the contaminated area.

AUDIENCE: There is no contaminated dirt on the street.

MR. SCHROCK: They are going to have to bring

it from that side of the site to where the feed preparation is. So yes, there probably will be trucks. Where the water/sewer line is going to be considered a clean area where a truck could drive over after he backs over the clean soil. So we will have trucks going as they progress taking from dirty to clean spots, you will still have trucks going over that.

AUDIENCE: I would like to direct a question to the company representative and ask what percentage of profit they expect to make on this contract.

MR. SCHROCK: I don't know if they have to answer that, but can you ask.

MR. HARRINGTON: I would be happy to tell you what typical profits; This is a publicly traded company. I just told you two of the major owners. There are also outstanding shares of trades on the New York Stock Exchange, and general pre-tax profit in this business right now, how much money we end up with before we pay taxes, probably three percent of a typical job size.

AUDIENCE: Would you say that is accurate for this job?

MR. HARRINGTON: Yes.

AUDIENCE: So three percent of $47 million.

MR. HARRINGTON: Yes, pre-tax, before we pay our taxes.

AUDIENCE: Why couldn't you include respiratory problems in your risk assessment?

MR. SCHROCK: Again, I'm not the toxicologist, but generally what they do is they look at different age groups. I'll have to ask and find out what he does to accommodate for respiratory problems. I honestly don't have an answer today, but I'll look into that.

AUDIENCE: I have one other problem. When you're talking about these monitoring stations, why can't we have one on the school. We don't need one set out in the middle of the country. We need one in the population area in a place where school children are to tell us whether that is a safe area. We don't need to worry about an open area somewhere to set up monitoring stations.

MR. SCHROCK: The school is a possibility. I would like to try and target some sort of public facility locations, again working with townships or school boards, the city. I think there is a benefit to try and go to those locations.

But until I run through a modeling exercise to know where the vicinity would be, then I could decide. It might be a school. It may not be that particular one, though.

The other thing you've got to remember, when I do this background monitoring, I'm going to find stuff. So

even if it's on a school, we are going to find stuff as present.

AUDIENCE: That is my point, why don't you do it where there are people rather than sitting it out in an isolated spot?

MR. SCHROCK: I would intend to try to get in a people area. The only time I would be thinking about an isolated spot would be in response to a number of questions about the inversion.

We have talked in other meetings that there are periods where you have these inversions and you have extended periods of stagnant conditions where there is no wind.

One of the things I would like to do as part of this in the community monitoring is have at least the capability to take one of these stations and move it into an area that would be this inversion to try and get some chemical data to see if, in fact, that would be a reason I should tell them to shut down. That's a possibility.

If there is a reason to shut them down, I can order that they do shut down. So if I get this one that is a movable type monitoring unit, that might be something I can either do, not on a continuous basis, but to check other spots as we go through.

And I have been asking to include some type of

a mobile unit, so I might be in an isolated spot here and there depending on weather conditions or things likes that.

AUDIENCE: I have here an EPA project summary of May 1993. You took ground from this site and you spiked it with certain chemicals to run a test burn and you came up to the 99.995, which is rather high.

Now you say during your trial burn you are also going to use that soil, spike those chemicals for your trial burn. And presumably you will come up with these same figures.

But then you are going to say, okay, we burned that stuff over there and we came up with this; now let's burn this over here. Are we supposed to feel comfortable with these figures when you are burning something else?

MR. SCHROCK: No.

AUDIENCE: When you are monitoring something, you are getting rid of something that you didn't bother monitoring during your trial burn, you came up with these two chemicals and came up with the high figure.

MR. SCHROCK: That was to prove that it could be done. This is to prove to us that this piece of equipment will do that. I can't take the results from that piece of equipment and say this one is okay because it was okay there. I am going to have this piece of equipment prove that --

AUDIENCE: Why not analyze what's in that soil, the actual stuff that you are trying to get rid of, and then make the trial burn of that, not with something that you inject into that soil?

Because that is the stuff you are going to be burning and what you will be facing during the next year. This puts everything into the captured spy category; you torture these figures long enough you can make them say anything you want to.

MR. SCHROCK: I fully agree with your point. I need to have real data as to how effective this is on the real dirt; one, the chemical information coming out the stack; and two, the chemical information of the soil, the treated soil. Okay. The reason -- the ash. Okay. I am asking for the data of the real dirt as it exists. Okay.

The reason I have to add this spiking material is to prove the regulatory requirement for four 9's. So I'm only going to do that long enough to prove it and that will stop. But I can't -- the concentrations I have in the dirt right now are too low. I don't have a thousand parts of something to show that only one comes out the stack.

My concentrations are down in the tens. So that is why. The concentrations are not high enough to prove the four 9's, which is what the regulations say I have to do. I can't do it on the regular dirt.

AUDIENCE: Then if it's that kind of a procedure and that is during the trial burn is the only time you do this --

MR. SCHROCK: Yes.

AUDIENCE: -- and then you turn it over to Wheelograder or Chemical Waste Management or WMX, are we supposed to be comfortable?

MR. SCHROCK: We are going to be watching to see that that equipment works on the real dirt. We will get the real chemical stack monitoring from burning the real dirt and we will look at the ash from what the real dirt is to start with, not the spiked dirt.

So yes, I agree completely. That's much more of a concern to me, but the requirements under RCRA for incinerators say you must prove the four 9's.

AUDIENCE: One other thing, this has nothing to do with the incinerator except I wonder what your comment would be. I don't know who said this but it was overheard in the front of the room earlier this evening, that only an armed rebellion can stop this. What would be your comment on that?

MR. PEDLOW: A successful armed rebellion.

MR. SCHROCK: Well, my typical answer is that I never say never. So, you know, yes, there is always the possibility that something could be done that stops this

project.

But I can tell you that my current role is to keep it moving and to keep it moving in a successful manner where we accomplish it. If my agency decides to tell me to stop doing this, then that is what I do. But no one has told me to stop moving the project forward at this point.

AUDIENCE: Last November Clyde Peeling and I attended a four-day conference sponsored by EPA on combustion, and nothing that I learned at that conference gave me any confidence that incineration is going to destroy anything or do anything more than move the contaminants from the soil into the air.

And I think that -- and I have heard an awful lot about monitoring here tonight -- but monitoring will be done after this thing is filled, and what the people of Lock Haven have to do is keep it from being built.

And I think if you -- EPA is very concerned about incineration, I learned that. They are very concerned about the safety of incineration and the efficacy of incineration. They are talking about bioremediation. They are talking about all sorts of things to take the place of incineration.

I would advise the people of Lock Haven to do everything you can to slow this project down because there is a good possibility that if you can hold it up for a

couple years, there will be some better method of remediating this site.

MR. SCHROCK: EPA is also very concerned about boilers and industrial furnaces. Okay. Incinerators are not the only thing that heats things up and puts emissions out into the air.

AUDIENCE: I am concerned with the whole combustion idea of hazardous waste.

MR. SCHROCK: It is my understanding that yes, in fact, we are going to be destroying some of these contaminants and not just moving them from the dirt into the air.

AUDIENCE: Yes. You will be destroying some; that's right.

MR. SCHROCK: But the other thing that I have to remind you is that when EPA makes these statements about not favoring incineration or the burning in any fashion, they are also talking about permanent facilities.

When you have a permanent facility that accepts hazardous waste, tons of it a day, and once they get their permit, they may be allowed to stay for who knows how long, twenty, thirty, fifty years.

You've got to remember, this project is only for one site and only for one year of really putting out. So that policy, the EPA policy, really was geared toward

those permitted facilities. Like I say, they are also very concerned about the boilers and industrial furnaces that are currently almost unregulated.

AUDIENCE: If you have to spike that dirt to do a test burn, if that dirt isn't contaminated enough to even do a test burn, why are you there?

MR. SCHROCK: Okay. The levels that we see in the soil are not high enough to get a thousand parts. However, the risk from the BNA is down in the very, very small numbers, like parts per trillion.

I can't -- you know, I can't even tell you how they analyze for something that is that small. So it's really the risk that says we should go there. Even though it is less than a thousand doesn't mean it's safe.

AUDIENCE: In the last five years, how many people have gotten cancer; how many people have died from that site laying just the way it was when you ripped the building down?

MR. SCHROCK: I don't know of any. But we haven't tracked it in that fashion.

AUDIENCE: Again, why are you there?

MR. SCHROCK: Because the way the law is written --

AUDIENCE: It's the law, though, it's not --

MR. SCHROCK: It says EPA is obligated to do

this, to take this effort to clean it up.

AUDIENCE: You have a Congressman saying that you have to do it. They don't know anything about what is going on any more than we do, but they are telling you you have to do it. So you are saying, well, I'm going to go in there, I'm going to spend 46 million bucks and do it because they say I do it. And then you're telling us that you can't even get enough for a test burn in the contaminants but you are still going to go ahead because it's contaminated.

MR. SCHROCK: It's still above a safe level. It is still a risk.

AUDIENCE: I don't think there's anybody gotten sick. I don't think there's anybody died since that building was ripped down out there. That site has laid there dormant; nobody has touched it. No problem.

MR. SCHROCK: Again, the agency and the way they have written the law is the way we implemented this law as to say --

AUDIENCE: We are back to the law; we are not back to the safety; we are back to the law. The law says you have to do it, you are out to do it.

MR. SCHROCK: The law says if there is a risk, you have to do something about it. And this is what we have chosen to do. Because there is a substantial risk the

way it sits right now.

You are right, nobody is out there eating the dirt and nobody is putting a home on it to build, you know, or drinking the water.

AUDIENCE: Do you think anything ever would?

MR. SCHROCK: No. But I still think the concentrations we have in the groundwater, we should make an attempt to get rid of what is in the groundwater before it goes out and keeps spreading even further.

AUDIENCE: That is one of the concerns I have. I've got an old well in my back yard. I brought this up the last time. When you say groundwater, my whole garden is planted right beside this well.

MR. SCHROCK: I think you are upgradient, though, aren't you?

AUDIENCE: I'm What?

MR. SCHROCK: I think you are the other direction from groundwater flow. The groundwater is basically flowing from AC&C through Drake down toward Bald Eagle.

AUDIENCE: I live on Bald Eagle Street, Bald Eagle and Hanna, down by the housing development, right below Robb School. I got a well there. Now, that water came from somewhere.

MR. SCHROCK: It hasn't gotten down there --

AUDIENCE: I don't know; is it going to come up, you know, am I getting contaminated from that food that I'm eating out of my garden year after year?

MR. SCHROCK: Well, I can't really answer that, but --

AUDIENCE: I'll tell you what, this year when my tomatoes get ripe, I'll bring them over to you to analyze them. You got to clean up that one site. I brought this up before, you got to clean up this one site, but Drake has been closed twenty years?

MR. SCHROCK: '82.

AUDIENCE: It's twenty years that stuff has been floating around under Lock Haven, right?

MR. SCHROCK: The last time we looked at the groundwater was in '87.

AUDIENCE: Has it moved since then or is it still sitting there?

MR. SCHROCK: It's moving, but not quickly.

AUDIENCE: Is It moving over to my place?

MR. SCHROCK: It hasn't even reached Bald Eagle yet. And you are not within the area that I have seen drawn.

AUDIENCE: I don't know that though. No one has drilled a hole to test the well in my back yard.

MR. SCHROCK: We have got wells in between the

site and you.

AUDIENCE: You do?

MR. SCHROCK: Yes. I'd have to get out my books and look it up. But again, I'm not exactly sure where the house is. I sort of know.

AUDIENCE: Has there ever been any incinerator in the United States anywhere shut down because we are doing something wrong here? And if there is, where is it? I know there is one somewhere. There has to be. They had to shut them down and say, hey, we are screwing up here

AUDIENCE: Chem Waste.

MR. SCHROCK: They probably know more than I do.

AUDIENCE: An explosion.

AUDIENCE: Now, can we build another incinerator that close in proximity? I think there's EPA laws saying we can't build it close to an old age housing project, close to schools. There has to be a law there saying, okay, we can't start an incinerator up; we are closer than a mile to a school.

MR. SCHROCK: That is for a permanent location.

AUDIENCE: Permanent.

MR. SCHROCK: Yes. And the way the Superfund is written, they want it to be done at the location.

AUDIENCE: I have already been through a lot

with the Federal Government, and they are not watching over us; they are hurting us.

MR. SCHROCK: I'm going to try and watch this one. But I'm not the Federal Government either; I just happen to work for them.

AUDIENCE: The monitor that you are talking about, a movable monitor, okay. If we put a movable monitor in, is that going to be real time or is that going to be thirty days? We can't shut them down and say --

MR. SCHROCK: It is not real time. I have to collect a sample and then send that off for analysis.

AUDIENCE: So in thirty days you will say, hey, we made a mistake, thirty days, will you shut her down now? Now it might be all right.

MR. SCHROCK: We will be doing daily analysis of the material that goes in. That will be done daily.

AUDIENCE: You were talking about downwind. We are upwind in Mill Hall. Is there going to be any checking done up there or are we safe?

MR. SCHROCK: Just from what I know of Mill Hall, it is pretty far away miles wise.

AUDIENCE: It's five minutes or less.

MR. SCHROCK: I know where the sign is. But one of them will be upwind. That is the idea of having four, so we can get -- because the wind, you know, it

changes. Even though you are generally upwind --

AUDIENCE: We used to get lots of dirt from the paper mill. I'm not complaining, just saying that it did come up there. What the paper mill was doing, we knew everybody wasn't afraid, so we were happy.

MR. SCHROCK: Well, there will be one at what we consider on the upwind side. That is why I have chosen four, to try and accommodate for the fact that the wind direction changes.

Let's take a minute.

(Brief recess.)

MS. NURSE: Ladies and gentlemen, we would like to get started again.

MR. SCHROCK: I guess we should try and start up again here. There is really only one more topic I wanted to bring up.

All right. I'll take the question first.

AUDIENCE: I've had my hand up for some time. The question I wanted to ask you, in 1996 you are going to have a layer of clean soil extending down to a depth of twelve and a half feet on that site, correct?

MR. SCHROCK: Well, almost, yes.

AUDIENCE: The water table on that site is likely to move up and down.

MR. SCHROCK: Yes.

AUDIENCE: How much of that clean soil is in some danger of being recontaminated by dirty groundwater that has not yet been treated? Is there a risk associated with that, and give me an estimate of what the risk is going to be.

MR. SCHROCK: The groundwater will, in fact, move up and down through the clean soils and the treated ash. There is no question that that is going to happen.

How much of it will stick to the clean soils or the ash, I truly don't know. This particular substance, we don't have good data on how good it sticks to things.

AUDIENCE: Will somebody check on that?

MR. PEDLOW: Beta naphthalene sticks well.

MR. SCHROCK: It does and it doesn't. But like I say, it's very questionable. There is no good hard science of how well it sticks.

My intention is not to purposely go down and recheck so that I can go dig it up and incinerate it again. My only concern about checking would be if, in fact, somebody wants to go in there and start building something, and then if they want to get a release from EPA for liability, then we are going to have to address is there any recontamination and at what levels that would be. And if they should then place any extra restrictions based on want they find.

AUDIENCE: What I'm asking you is, do you know of the probability that clean soil will be recontaminated?

MR. SCHROCK: I think the probability is high. I just don't know at what concentrations it will be recontaminated.

AUDIENCE: So you don't know whether it is above the level at which you would consider it to be a problem?

MR. SCHROCK: No, I don't know that yet. If I'm lucky, and this is really the one thing I really wanted to mention again, we do have to get the groundwater pump and treat program in place. Okay.

Within the next year or two, I think AC&C will have a full-scale pumping operation on their property, and I hope to have in conjunction with them full-scale pumping in what I call Zone 2 or that area between the track and 220.

So that will at least minimize the up and down because those wells will continue to be extracting. And the other part of it is, over time I hope the groundwater concentrations will decrease.

But the real benefit is, if I remove the main source of the beth naphthalene, even if it moves up and down, it is not going to be the kind of concentrations I have there now, and the permanence will not be as forever.

Because once the groundwater is cleaned up, it will still move up and down. But again, yes, it's going to be recontaminated. At what levels, I don't know, but that is not going to constitute a reason for me to go back in and dig it all up a second time and do it another time. Once is all we are going to do it at this site.

AUDIENCE: What if you found out that it was recontaminated to near the same level that it already is? It is no likely, I admit, but...

MR. SCHROCK: EPA does have a policy where we would have to do a five-year review to basically say is there something more we ought to be doing now. That will kick in because we still will have the groundwater contamination.

Yes, it is a possibility. But I would be surprised if it really went back up to the concentrations that were there based on the lagoons from before. And again, if somebody is going to get down there and start digging around, they are going to have to look, and then yes, maybe that means we are going to have to do something.

I won't say we won't, but our plans are not to go looking and to try and just reincinerate it a second or third time based on the groundwater flow.

MR. PEDLOW: Again, I'm George Pedlow; I'm a geologist from Lock Haven. You, at the beginning of this

evening, said that you were going to dig down twelve and a half feet because two things happen at twelve and a half feet, you go out of the soil and into the sand and gravel deposit, and it's the sand and gravel deposit that largely contains the water, which is generally true on the long-term average.

But just in the last two years, the water table has gone through a vertical transient of about seven feet twice, and the streams have never gotten to flood stage. The adjacent streams have never gotten to flood stage.

The second point is that the Flood Plain Management Review Committee has recently issued a report in which they are recommending that RCRA facilities be designed to withstand the effects of the standard project flood.

And I'm also addressing this to the gentlemen from the Baltimore District. Correct me if I'm wrong, our present levy situation doesn't even get up to the standard project flood level; is that right?

MR. SCHROCK: My understanding is, RCRA has a 100-year flood requirement.

MR. PEDLOW: I'm saying this is a recommendation.

MR. SWANSON: Once it's completed?

MR. PEDLOW: The finished grade of the levy is

not up to the standard project flood level.

MR.. SWANSON: I have no idea what that term means. I do know the levy is designed for a frequent storm of 200 years. I don't know what the flood plain management's standard projects are.

AUDIENCE: Apparently it varies from place to place in the country. And here it's like a 350-year storm, roughly speaking.

MR. SWANSON: I haven't heard that. I'm not familiar with that terminology.

MR. PEDLOW: Another way of looking at it is that the general design memorandum says that is something like 70 percent of -- the planned grade for the levy is 70 percent of the standard project flood.

The point that I'm trying to get at here is, would these recommendations in this newly issued report have any effect on what you are planning to do?

MR. SCHROCK: I don't know what that new report says about the flood plain conditions. Under RCRA we are required to do protection for a 100-year flood for any facility in a flood plain; and that is the way we wrote the record of decision for this site.

And it's my understanding that the levy that has been built will meet the 100-year flood protection requirement. So if this report has a different

recommendation, I would have to see it.

But again, the purpose of that kind of requirement is really talking about a permanent facility. Not that I don't have to worry about a flood if I'm there during the time one happens. I still have to worry about that.

But if that is a long-term recommendation, then I'm sure it's applied to something more on a permanent basis. But generally we don't -- we won't permit something or they should not be permitting that kind of facility in a flood plain.

We are only doing that because that is where the site is located and our goal it to try to remediate it at the site.

MR. BROGARD: Roy, I'm Bob Brogard from Lock Haven. You seem to be concentrating on four monitoring points. In view of the anxiety level, why wouldn't you care to expand that to six or even eight?

I would simply think that the people have a right to have that level of security, that yes, there is nothing out there.

Would it increase your budget that much or --

MR. SCHROCK: Well, it's not really a budget concern as much. I have said before, if something has to

be done for protectiveness, I would do that. To be honest, the real reason is, you are going to find something out there.

MR. BROGARD: Sure.

MR. SCHROCK: And it's going to be very difficult, if not impossible, to really relate what we find back to the incinerator. What I'm really trying to say is, I have asked around the country a number of places on how to do this, and there really isn't any, quote, cook book recommendation of how to go about doing an in-the-community ambient air monitoring program.

And the reason that it's so difficult and we are going to be doing this and hopefully, you know, I will get reliable data, but what we have seen at other sites is, you could have two samplers, both for the volatile chemicals on the same platform and come up with dramatically different data out of two points that are only five feet apart.

What I'm trying to say is that this is not really very reliable information from a scientific point of view. So yes, I think we need to do it. If we get into something where we find that, yes, in fact, we should be doing more, I'll ask them to add more.

MR. BROGARD: It would seem to me data from eight is better than data from four.

MR. SCHROCK: If it tells me something, yes, it would be better. Okay.

MR. BROGARD: But unless you ask, you don't know what you are going to get back.

MR. SCHROCK: Right. So that's why I'm starting with four. I'll do a base line and I'll do it during operation. If I find there is a dramatic difference that I can attribute to the incinerator operation, because we will have the chemical data from the stack trial burn monitoring, if I find those particular chemicals are the ones showing up changing from base line to incineration, then that is going to tell me that maybe I do need to do something more.

So again, it's more that I have to start at some point, and this is the place that I have decided to choose, at least for the four stations, including, we got four more around the perimeter as well as the workers on site, and we do have chemical data going out the stack. I may need to monitor more times going out the stack as well.

But if I were going to really be adding more money and cost to the project, I would rather have more in-stack testing to make sure that that equipment is working the same way it started than more monitors in the community.

So, you know, it's a trade-off, but until I

get -- you know, there's a number of things we've talked about in the project. I'm going to go through pre-monitoring, during monitoring, and then once we start operation, I've got a good thirty days of full scale everyday monitoring.

I'm going to have to get that data and sit down and look at it and figure out, do we need to do anything different; is there something that has to change.

So I'm not opposed to that, but I've got to start somewhere and that is where I have chosen to start, in lack of an EPA recommended how to do it. There is no reg out there that I can say that is why I chose four.

But we are going to have four stations with five or six different monitor sampling units on each of those stations and have the ability to get something that I might be able to move where we find a problem.

I'm more concerned about the inversion than anything else. I think we need an answer to that question. When we get stagnant wind, what does that do to the air concentration?

MR. BROGARD: I have one more question. You have a twelve-foot depth on it, suppose there is a sinkhole right below that twelve-foot?

MR. SCHROCK: That was on my list. We have the ability to say we found something here and it's below your

twelve and a half feet. It's a big gunk of purple mass; yes, dig it out. That goes too.

The only reason we set that elevation level is because you still need to define the project. And I didn't want to set a chemical number so that they would have to keep sampling and sampling and before you know it, I'd probably be digging up all of AC&C, and then instead of 40 million, I would be talking 100.

So I had to at least define the limits as to where I stopped. But we do have the ability to say that's below your elevation and it still looks like it could -- what if there was a drum down there; yeah, take the drum out.

The contract does allow for costs specific to taking drums out and taking them off site for disposal. So yeah, we have the ability to play a little bit like that.

Okay. I'm going to stay around for a while. I'll still be ready to answer questions, but I want to give this woman a break. And Leanne has another comment?

MS. NURSE: No. I just wanted to remind people, we have a sign-in sheet. It is not formal but it will get transcribed. So if you would like to receive -- we are going to be doing some future mailings and other announcements. People have requested certain types of material.

So if you have a specific interest or if you would like to become part of an updated mailing list, please sign it before you leave. Thank you.

MR. SCHROCK: Thank you again.

(The meeting was concluded at 9:45 p.m.)

COUNTY OF CAMBRIA :
: ss.
COMMONWEALTH OF PENNSYLVANIA :

I hereby certify that the proceedings are contained fully and accurately in the notes taken by me on the within proceedings and that this copy is a correct transcript of same.

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HEATHER J. GOSS, Notary Public
Johnstown, Cambria County, Pa.
My Commission Expires Jan. 2, 1995

Heather J. Goss
Heather J. Goss
Stenographer

My commision expires
January 2, 1995.

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